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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/082,333	02/26/2002	Ju Wan Kim	P67660US0	4101

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EXAMINER

AILES, BENJAMIN A

ART UNIT PAPER NUMBER

2142

DATE MAILED: 03/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/082,333	Applicant(s) KIM ET AL.	
	Examiner Benjamin A Ailes	Art Unit 2142	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 26 February 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

1. Claims 1-6 have been examined.

***Priority***

2. The papers required in order to receive an earlier effective filing date have been received. The effective filing date for the subject matter defined in the pending claims in this application is 24 December 2001.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:  

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claims 1-3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
5. Regarding claim 1, the phrase "transmitting/receiving" renders the claim indefinite because it is unclear whether both limitations are part of the claimed invention. The phrase "to/from" renders the claim indefinite because it is unclear whether both limitations are part of the claimed invention. For examination proceedings, the symbol "/" will be interpreted as "or."
6. Regarding claim 2, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Walker et al. (U.S. 2002/0013708), hereinafter referred to as Walker.

9. Regarding claim 1, Walker teaches a communication method among participants connected through a network in virtual environments, the method comprising the steps of:

- A plurality of senders inputting and transmitting text messages (para. 0081, lines 2-8);
- A receiver selecting reception and conversion of the text message from a desired sender among the plurality of senders into a speech (para. 0083, lines 2-5); and
- The receiver converting the text message of the desired sender into the speech, and outputting the speech through a speaker while transmitting/receiving the text messages to/from other participants (para. 0081, lines 2-8 and para. 0083, lines 2-5).

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walker in view of Socher et al. (U.S. 6,446,040), hereinafter referred to as Socher.

12. Regarding claim 2, in accordance with claim 1, Walker teaches:

- Selecting an identifier of the sender (para. 0022 and para. 0083, lines 9-14);
- Determining a virtual voice of the sender (para. 0023 and para. 0084, lines 1-6);

Walker teaches the step of determining a virtual voice of a sender (para. 0084, lines 1-6) in order to generate speech that sounds like the user, but is silent on the use of determining a sound effect in order to grasp a virtual position of the sender. However, in analogous art, Socher discloses an intelligent text-to-speech synthesis method of generating text into speech as well as adding sound effects in order to place special emphasis and place more meaning into the message (see Socher, col. 2, lines 37-58). One of ordinary skill in the art at the time of the applicant's invention would have found it obvious to utilize the combination of the text message speech generator as disclosed by Walker and the speech synthesis with the addition of sound effects method as disclosed by Socher in order to place special emphasis and input more meaning into what is being said. One of ordinary skill in the art would have been motivated to make such a combination because by adding sound effects, the method of Walker is improved upon

by enhancing the message sent by the user and is made to sound more life-like (Walker, para. 0084, lines 4-6, para. 0114, and Socher, col. 2, lines 47-58).

13. Regarding claim 3, in accordance with claim 2, Walker teaches the step of determining a virtual voice of a sender to be heard by the recipient (para. 0084, lines 1-6, para. 0107, lines 4-12, and para. 0114), an accent of the voice, and an intonation of the voice (para. 0107, lines 4-10, and para. 0114, lines 1-12).

14. Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walker in view of Abe (U.S. 5,940,797), hereinafter referred to as Abe, and in further view of Socher.

15. Regarding claim 4, Walker teaches:

- A text message receiving means for receiving text messages from a plurality of senders (para. 0081, lines 2-8).

Walker teaches the step of using speech synthesis in order to transform text into speech (para. 0084, lines 1-6) but is silent on the actual detailed method used in order to complete the speech synthesis. However, in analogous art, Abe discloses a speech synthesis method used to convert text into speech that divides the text message into phonemes (col. 3, lines 53-57) and the conversion of the divided phonemes into a speech (col. 4, lines 49-56). One of ordinary skill in the art at the time of the applicant's invention would have found it obvious to use the speech synthesis phoneme dividing means as disclosed by Abe in combination with speech synthesis method as disclosed by Walker. One of ordinary skill in the art would have been motivated to make such a combination because by using the text message to speech method disclosed by Walker

Art Unit: 2142

utilizing the speech synthesis method disclosed by Abe, one can enhance the output by identifying the input text by a sequence of phonemes of each word (Abe, col. 2, lines 28-30).

Walker teaches the step of determining a virtual voice of a sender (para. 0084, lines 1-6) in order to generate speech that sounds like the user, but is silent on the use of determining a sound effect in order to grasp a virtual position of the sender.

However, in analogous art, Socher discloses an intelligent text-to-speech synthesis method of generating text into speech as well as adding sound effects in order to place special emphasis and place more meaning into the message (see Socher, col. 2, lines 37-58). One of ordinary skill in the art at the time of the applicant's invention would have found it obvious to utilize the combination of the text message speech generator as disclosed by Walker and the speech synthesis with the addition of sound effects method as disclosed by Socher in order to place special emphasis and input more meaning into what is being said. One of ordinary skill in the art would have been motivated to make such a combination because by adding sound effects, the method of Walker is improved upon by enhancing the message sent by the user and is made to sound more life-like (Walker, para. 0084, lines 4-6, para. 0114, and Socher, col. 2, lines 47-58).

16. Regarding claim 5, in accordance with claim 4, Walker teaches the step of using speech synthesis in order to transform text into speech (para. 0084, lines 1-6) but is silent on the use of synthesizing by vocabulary. However, in analogous art, Abe discloses a speech synthesis method used to convert text into speech that references to

Art Unit: 2142

a word dictionary in order to generate accurate synthesized speech (2, lines 28-30 and 42-44) One of ordinary skill in the art at the time of the applicant's invention would have found it obvious to use the speech synthesis method utilizing a word dictionary as disclosed by Abe in combination with speech synthesis method as disclosed by Walker. One of ordinary skill in the art would have been motivated to make such a combination because by using the text message to speech method disclosed by Walker utilizing the speech synthesis method disclosed by Abe, one can enhance the output by identifying the input text by a sequence of phonemes of each word by referencing a word dictionary (Abe, col. 2, lines 28-30).

17. Regarding claim 6, in accordance with claim 4, Walker teaches the tone generating means for providing a tone, an accent, and an intonation of the speech (para. 0107, lines 4-10, and para. 0114, lines 1-12).

### ***Conclusion***

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Lemaire et al. (U.S. 5,613,038) disclose a communications system for multiple individually addressed messages.

Iwata (U.S. 6,070,138) discloses a system and method of eliminating quotation codes from an electronic mail message before synthesis.

Jones (U.S. 5,832,221) discloses a universal message storage system.



Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin A. Ailes, whose telephone number is (571)272-3899. The examiner can normally be reached on Monday-Friday (7:30-5).

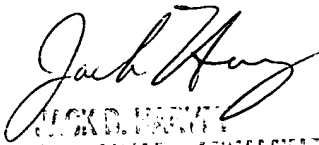
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Harvey can be reached at (571)272-3896. The fax phone number for the organization where this application or proceeding is assigned is (703)872-3906.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [benjamin.ailes@uspto.gov].

All Internet e-mail communications will be made of record in the application file.

PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

  
JACK D. HARTY  
SUPERVISOR, PATENT EXAMINER

Benjamin Ailes  
Patent Examiner  
Art Unit 2142